

CLAIMS

Sub
al

1. ~~A groping operation apparatus, comprising:~~

a display device having a display screen;

5 a touch panel, which is provided on the display screen, for outputting the positional information indicating a contact point on the touch panel that is touched by the operator;

specifying means for specifying an action commanded by the operator touching the touch panel in accordance with the positional
10 information; and

control means for outputting a control signal in accordance with an output of said specifying means,

wherein in that said specifying means detects said contact point moved from one end portion of said touch panel to another end
15 portion, with the end portions located at four corner areas of said touch panel, on the basis of said positional information, and said action commanded by said operator is specified from a movement start end portion and a movement termination end portion of said detected contact point.

20

2. ~~A groping operation apparatus, comprising:~~

a display device having a display screen;

a touch panel, which is provided on said display screen, for outputting the positional information indicating a contact point on
25 said touch panel that is touched by the operator;

100220-0000000

control means for outputting a control signal in accordance with an output of said specifying means,

3. A groping operation apparatus, comprising:

a touch panel, which is provided on said display screen, for outputting the positional information indicating a contact point on said touch panel that is touched by the operator;

control means for outputting a control signal in accordance with an output of said specifying means,

wherein said specifying means detects said contact point moved along a peripheral portion of said display screen, on the basis of said

positional information, and said action commanded by said operator is specified from a movement start position and a movement termination position of said detected contact point.

5 4. The groping operation apparatus according to claim 1, wherein said specifying means specifies said action commanded by the operator from the number of movements of the detected contact point.

10 5. The groping operation apparatus according to claim 1, wherein said specifying means specifies said action commanded by the operator from the movement speed of the detected contact point.

15 6. A groping operation apparatus, comprising:
a display device having a display screen;
a touch panel, which is provided on said display screen, for outputting the positional information indicating a contact point on said touch panel that is touched by the operator;

20 specifying means for specifying an action commanded by the operator touching said touch panel in accordance with the positional information; and

control means for outputting a control signal in accordance with an output of said specifying means,

25 wherein said specifying means detects said contact point moved on said touch panel on the basis of the positional information,

calculates a movement direction of said contact point from a movement start position and a movement termination position of said detected contact point, and specifies the action commanded by the operator on the basis of said calculated movement direction.

5

7. The groping operation apparatus according to claim 6, wherein said specifying means specifies the action commanded by the operator from the number of movements of the detected contact point.

10

8. The groping operation apparatus according to claim 6, wherein said specifying means specifies the action commanded by the operator from the movement speed of the detected contact point.

15

9. A groping operation apparatus, comprising:

a display device having a display screen;

a touch panel, which is provided on said display screen, for outputting the positional information indicating a contact point on said touch panel that is touched by the operator;

20

specifying means for specifying an action commanded by the operator touching said touch panel in accordance with the positional information; and

control means for outputting a control signal in accordance with an output of said specifying means,

100270-2656860

wherein said specifying means detects said contact point that is moved along a peripheral portion of said display screen to an end portion of said touch panel after being moved on said touch panel from an area other than the peripheral portion of said touch panel to the peripheral portion of said touch panel, with the end portions located at four corner areas of said touch panel, on the basis of said positional information, and specifies the action commanded by the operator from a movement start position in said peripheral portion and a movement termination position of said detected contact point.

10. The groping operation apparatus according to claim 9, wherein said control means sends out a control signal in accordance with an output from said specifying means to the electrical device mounted on the vehicle.

11. The groping operation apparatus according to claim 10, wherein said control means sends out a control signal in accordance with an output from said specifying means to the acoustic device mounted on the vehicle to adjust the sound volume for the acoustic device.

12. The groping operation apparatus according to claim 10, wherein said control means sends out a control signal in accordance with an output from said specifying means to the acoustic device mounted on the vehicle to instruct a track number of the recording medium on which the acoustic device records or reproduces.

13. The groping operation apparatus according to claim 9, wherein
when the movement of the contact point in the peripheral portion of
said touch panel occurs in a longitudinal direction of said touch
panel, said control means outputs a control signal for increasing or
5 decreasing a set value of the electrical device connected to said
groping operation apparatus.